1. Field of the Invention--

On page 1, between lines 7 and 8, please insert the following heading:

--2. Brief Description of Related Developments--

- Please delete the paragraph starting on page 1, line 8 through line 26 and replace with the following replacement paragraph:

--Various different cable structures are utilised in the construction of electronic appliances. As the frequencies of operation increase, there are higher requirements set for the cable structures to be used, in order to prevent attenuation caused by said cable structures. At present, in the structures of electronic appliances, there is generally applied the so-called multilayer technique, which is based either on the HTCC technique (High Temperature Cofired Ceramics) or on the LTCC technique (Low Temperature Cofired Ceramics). With both manufacturing methods, the produced structures consist of several green tapes, with a thickness of about 100 µm, which are positioned one on top of the other. Prior to thermal treatment, the material still is soft, so that in the green tapes, there can be made cavities of desired shapes. Likewise, at desired spots, there can be silk-screened various electrically passive elements. The elastic layers are laminated together by means of pressure. In order to prevent the lamination pressure from collapsing the structure that contains various cavities, the pressurising must be carried out according to a so-called unaxial method. This means that the pressure is directed to the

object only in the direction of the axis z of said object. Finally the created structure is burnt, in the case of LTCC at 850 degrees and in the case of HTCC at 1,600 degrees. In the elements to be produced, at the cavities there are made perforations through which the excess pressure created in the burning process can be let out.--

- Please delete the paragraph starting on page 1, line 27 through page 2, line 9 and replace with the following replacement paragraph:

--In figures 1a and 1b, there is illustrated a possible alternative for realising an inverted microstrip cable based on the HTCC or LTCC multilayer technique according to the description above. In a preferred embodiment, the structure according to figure 1a is achieved by joining together, during the production process but prior to the burning step of the structure, the exemplary elements 12 and 13 illustrated in the drawing. Both of said elements are made layer by layer of some suitable dielectric material in a fashion described above. In the element 13, there is machined a rectangular groove, on the bottom of which there is silk-screened a signal cable 10. The thickness 18 of the element 13, as shown in figure 1b, when measured at the bottom of the groove, is sufficient to prevent disturbing ground potential levels from coming close to the described inverted microstrip cable. In the example illustrated figure 1b, the angle between the side walls of the groove made in the element 13 and the groove bottom 16, 17 is 90 degrees, but in principle the angles can have some other size, too. On the surface of the element 12, there is silk-screened a ground cable 11, the width whereof corresponds to the width of the groove made in the element 13. The elements 12 and 13 are

machined separately, and when they are connected, there is obtained a structure according to figure 1a, where there is created a gas-filled cable cavity 14.--

- Please delete the paragraph starting on page 2, line 22 through line 28 and replace with the following replacement paragraph:

--However, the use of electric circuits manufactured by the above described techniques becomes problematic, if very high frequencies must be used (RF applications). Signal attenuation in a cable structure realised with LTCC technique at the frequency of 20 GHz rises up to 0.2 dB/cm, and in a cable structure realised with HTCC technique up to 0.6 dB/cm. In such RF applications where low attenuation is required, for example in filters and oscillation sources having a high quality factor (Q value), the above described techniques are no longer feasible.--

- On page 4, between lines 20 and 21, please insert the following heading:

--BRIEF DESCRIPTION OF THE DRAWINGS--

- On page 5, between lines 6 and 7, please insert the following heading:

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT(s)--

- Please delete the paragraph starting on page 6, line 14 through line 32 and replace with the following replacement paragraph:

--In the embodiment illustrated in figure 3, the signal cable 30 of an inverted microstrip cable is attached to a support element 35, which is narrowed in a triangular fashion towards the bottom of the transmission cable cavity. The cable structure according to the drawing is composed of at least two separate elements 32 and 33. The contact surface of the elements, which in the drawing is illustrated by the dotted line 36, is chosen to be the best possible with respect to the manufacturing of the structure. The contact surface 36 of the elements 32 and 33 can be, as is illustrated, the plane of the signal cable 30 attached to the support element 35, but it can also be some other plane. The support element 35 can be produced in connection with the production of the element 33, but it can also be produced separately, in which case its contact surface with the element 33 can be a plane which in the drawing is illustrated by the dotted line 37. Part of the electromagnetic field, illustrated by the power lines 34, emitted from the signal cable 30 towards the ground cable 31, proceeds for a short length inside the support element 35. The part of the electromagnetic field that is left inside the support element is smaller than the part left in the bottom substrate in the prior art arrangement illustrated in figure 1b. In the illustrated preferred embodiment, the attenuation per unit of length is thus lower than the attenuation of an inverted microstrip cable according to the prior art.--

- Please delete the paragraphs starting on page 6, line 33 through page 8, line 8 and replace with the following replacement paragraphs:

--In the embodiment illustrated in figure 4, the signal cable 40 of an inverted microstrip cable is attached to a support element 45 that is wider towards the bottom of the groove made in the element 43. The illustrated structure is composed of at least two separate elements 42 and 43. The elements are treated so that inside the elements 42 and 43, there is created a cable cavity according to the illustration. The contact surface of the elements 42 and 43, illustrated by the dotted line 46, is chosen to be the best possible with respect to the manufacturing of the product. The contact surface of the elements 42 and 43 can be, as is illustrated, a plane of the signal cable 40 attached to the support element 45, but it may also be another plane that is advantageous for the manufacturing process. In this embodiment, part of the electromagnetic field, illustrated by the power lines 44, emitted from the signal cable 40 towards the ground cable 41, proceeds through the support element 45. However, the part that passes through the support element is remarkably smaller than in the case of the prior art inverted microstrip cable illustrated in figure 1b. Thus the attenuation per unit of length also in this embodiment is lower than in a prior art inverted microstrip cable.

In the embodiment illustrated in figure 5, the signal cable 50 of an inverted microstrip cable is attached to a support element 55 having the shape of a T-beam. The walls encasing the transmission cable are composed of at least two elements 52 and 53, and the sectional plane perpendicular to the patterns of said elements, said sectional plane being illustrated by the

dotted line 56, is chosen so that the number of work steps in the manufacturing process is minimized. The support element 55 can be manufactured in several alternative ways. One alternative is to produce the support element 55 and the signal cable 50 separately, starting from the plane at the base of the T-beam, which plane is illustrated by the dotted line 57. The support element 55 and the signal cable 50 are connected, as a uniform structure, to the element 52. The ground cable 51 can be produced for instance in the way illustrated in connection with figure 1b. When the elements 52, 53 and 55 are connected together, the ground cable 51 is located in the cable cavity on the opposite side of the signal cable 50. In figure 5 it is seen that the electromagnetic field emitted from the signal cable 50 towards the ground cable 51, which field in the drawing is illustrated by the power lines 54, passes only a short way in the dielectric material, in the support element 55. As a consequence, the inverted microstrip cable according to the drawing has an extremely low attenuation per length unit, in comparison with the attenuation of a prior art inverted microstrip cable.

In the embodiment illustrated in figure 6, the transmission cable structure is composed of at least two elements 62 and 63. The contact surface of the elements 62 and 63, illustrated by the dotted line 66, is chosen to be the best possible with respect to the manufacturing of the product. It may be located at the illustrated point, in which case it is level with the surface of the support element 65, which in the drawing is illustrated by the dotted line 66. In this embodiment, the shape of the support element is inwardly curved. The support element 65 constitutes part of the element 63. Also in this embodiment only a small part of the electric field is emitted from the